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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. **MSC-23518-1**First Inventor **Karen M. Taminger**Title **Solid Freeform Fabrication Apparatus and Method**Express Mail Label No. **EU657647867US****APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)

2. Applicant claims small entity status.
See 37 CFR 1.27.

3. Specification [Total Pages **48**]
(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4. Drawing(s) (35 U.S.C. 113) [Total Sheets **3**]

5. Oath or Declaration [Total Pages **2**]

a. Newly executed (original or copy)

b. Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)

i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

6. Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)

- a. Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. paper
- c. Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. Assignment Papers (cover sheet & document(s))

10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) Attorney

11. English Translation Document (if applicable)

12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations

13. Preliminary Amendment

14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)

15. Certified Copy of Priority Document(s) (if foreign priority is claimed)

16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.

17. Other: **Letter w/certificate of mailing**

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation Divisional Continuation-in-part (CIP)

of prior application No.: _____ / _____

Prior application information: Examiner: _____ Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion of the disclosure is inadvertently omitted from the submitted application parts.

MAILING ADDRESS

<input checked="" type="checkbox"/> Customer Number or Bar Code Label	(Insert Customer No. or Bar Code Label Here)		<input type="checkbox"/> or <input type="checkbox"/> Correspondence address below
Name	Theodore U. Ro		
Address	NASA Johnson Space Center 2101 NASA Road One Mailcode: HA		
City	Houston	State	TX
Country	USA	Telephone	281-244-7148
Fax	281-244-8452		

Name (Print/Type) **Theodore U. Ro** Registration No. (Attorney/Agent) **52,168**Signature **Theodore U. Ro** Date **08/01/2003**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

03917 U.S. PTO
10/637086
08/01/03

14023 U.S. PTO
08/01/03

Express Mailing Certificate No. EU657647867US

PTO/SB/17 (05-03)

Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1744.00)

Complete if Known

Application Number	
Filing Date	8/1/2003
First Named Inventor	Karen M. Taminger
Examiner Name	
Art Unit	
Attorney Docket No.	MSC-23518-1

METHOD OF PAYMENT (check all that apply)

Check Credit card Money Order Other None

Deposit Account:

Deposit Account Number

Deposit Account Name

14-0116

National Aeronautics and
Space Administration

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) during the pendency of this application
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	40.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

**or number previously paid, if greater; For Reissues, see above

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Theodore U. Ro	Registration No. (Attorney/Agent)	52,168	Telephone	281-244-7148
Signature	<i>Theodore U. Ro</i>			Date	8/1/03

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

NASA CASE NO. MSC-23518-1

Patent Application

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Sean O'Keefe) Group Art
) Unit:
First Named Inventor:	Karen M. Taminger)
)
Serial No.:)
)
Filed :	August 1, 2003)
)
For:	Solid Freeform Fabrication Apparatus and)
	Methods)
)

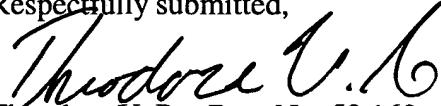
Letter

MS Patent Application
Commissioner for Patents
P. O. Box 1450
Alexander, VA 22313-1450

Sir:

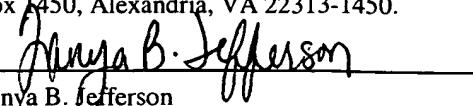
The enclosed application is being filed in accordance with Rules 1.10 and 1.53(b) in order to obtain a filing date of August 1, 2003. The application is being sent by Express Mail "Post Office to Addressee" under Certificate EU657647867US.

Respectfully submitted,


Theodore U. Ro, Reg. No. 52,168
Attorney for Applicant

Houston, Texas 77058
Telephone: 281-244-7148 or 281-483-4871
Datafax: 281-244-8452

I hereby certify that the attached application "Solid Freeform Fabrication Apparatus and Methods," is being deposited with the United States Postal Service on August 1, 2003, as Express Mail "Post Office to Addressee" under Certificate No. EU657647867US in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Tanya B. Jefferson

NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)	First Named Inventor	Karen M. Taminger
	Title	Solid Freeform Fabrication Apparatus and Methods
	Atty Docket Number	MSC-23518-1

I hereby certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

3/1/03

Date



Signature

Theodore U. Ro, #52,168

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**